

# ABSTRACT

1 A motion picture film projector including a lamp house  
2 section having a lamp bulb and a reflector; a head  
3 section located in front of the lamp house section; and  
4 an optical member located proximate a junction between  
5 the lamp house section and the head section. The optical  
6 member has infrared filtering coatings on both a front  
7 side and a rear side of the optical member. The  
8 reflector has a rear aperture with a portion of the lamp  
9 bulb extending therethrough. The rear aperture is larger  
10 than a center outer diameter of the lamp bulb. The lamp  
11 bulb and the reflector are sized and shaped such that an  
12 operator looking rearward from a front side of the lamp  
13 bulb and reflector can see a general ring shaped gap  
14 between the reflector and the lamp bulb when the lamp  
15 bulb is aligned relative to the reflector.